REMARKS

Claims 1-14 are pending in the application. Claims 1-14 stand rejected. Independent claims 1 and 11 are amended to distinguish the claimed invention over the cited references. Claim 3 is amended to correct a typographical error in a non-limiting amendment. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 103

Claims 1, 11, and 12 stand rejected under 35 U.S.C. § 103(a) as being obvious based on Park et al (U.S. Pat. No. 5872771). This rejection is respectfully traversed.

Park et al. is generally directed toward adaptive connection admission control using traffic measurement and estimation. In particular, Park et al. is directed toward determining whether a connection is to be accepted by using the peak cell rate among user-declared traffic parameters and an estimation value of the average cell rate of individual connections obtained by dividing a measured cell rate by a number of current connections. However, Park et al. does not teach, suggest, or motivate performing admission control for a plurality of service classes in a way that guarantees that QoS requirements of one service class using an ingress-to-egress path will be satisfied if a new set of flows of another service class using that path are admitted into the domain. In particular, Park et al. does not teach, suggest, or motivate assuming new flows have highest priority and testing an admission control condition for each of a plurality of service classes, wherein an arriving aggregate traffic envelope associated with admitted traffic and a service curve are obtained for each service class.

Applicant's claimed invention is generally directed toward measurement-based admission control utilizing effective envelopes and service curves. In particular, Applicant's claimed invention is directed toward performing admission control for a plurality of service classes in a way that guarantees that QoS requirements of one service class using an ingress-to-egress path will be satisfied if a new set of flows of another service class using that path are admitted into the domain. For example, independent claims 1 and 11 as amended recite "assuming new flows have highest priority and testing an admission control condition for each of a plurality of service classes, wherein an arriving aggregate traffic envelope associated with admitted traffic and a service curve are obtained for each service class". Support for the amendments may be found in the specification as originally filed at page 21, line 20-page 22, line 5, and as discussed at page 28, lines 11-22 of the originally filed specification. Thus, Park et al. does not teach, suggest, or motivate all of the elements recited in the independent claims. These differences are significant because obtaining an arriving aggregate traffic envelope associated with admitted traffic and a service curve for each service class, and testing an admission control condition for each of a plurality of service classes while assuming new flows have highest priority guarantees that QoS requirements of one service class using an ingress-to-egress path will be satisfied if a new set of flows of another service class using that path are admitted into the domain.

Accordingly, Applicants respectfully request the Examiner withdraw the rejection of independent claims 1, 11, and 12 under 35 U.S.C. 103(a), along with rejection on these grounds of all claims dependent therefrom.

Claims 2-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Park et al (U.S. Pat. No. 5,872,771) in view of Liebeherr et al. ("Effective Envelopes: Statistical Bounds on Multiplexed Traffic in Packet Networks", hereinafter "Liebeherr"). This rejection are respectfully traversed.

For discussion of Park et al., Applicant respectfully refers the Examiner to remarks detailed above with respect to rejection of claims 1, 11, and 12.

Liebeherr is generally directed toward effective envelopes. In particular, the Examiner relies on Liebeherr to teach calculation of global and local effective envelopes. However, Liebeherr does not teach, suggest, or motivate assuming new flows have highest priority and testing an admission control condition for each of a plurality of service classes, wherein an arriving aggregate traffic envelope associated with admitted traffic and a service curve are obtained for each service class. These differences are significant because obtaining an arriving aggregate traffic envelope associated with admitted traffic and a service curve for each service class, and testing an admission control condition for each of a plurality of service classes while assuming new flows have highest priority guarantees that QoS requirements of one service class using an ingress-to-egress path will be satisfied if a new set of flows of another service class using that path are admitted into the domain.

Accordingly, Applicants respectfully request the Examiner withdraw the rejection of claims 2-8 under 35 U.S.C. 103(a) based on their dependence form an allowable base claim.

Claims 9 and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Park et al (U.S. Pat. No. 5872771) in view of Cruz et al. ('Scheduling for Quality of

Service Guarantees via Service Curves", hereinafter "Cruz"). This rejection are respectfully traversed.

For discussion of Park et al., Applicant respectfully refers the Examiner to remarks detailed above with respect to rejection of claims 1, 11, and 12.

Cruz is generally directed toward scheduling for quality of service via service curves. In particular, the Examiner relies on Cruz to teach development and use of service curves in scheduling to ensure delivery of service. However, Cruz does not teach, suggest, or motivate assuming new flows have highest priority and testing an admission control condition for each of a plurality of service classes, wherein an arriving aggregate traffic envelope associated with admitted traffic and a service curve are obtained for each service class. These differences are significant because obtaining an arriving aggregate traffic envelope associated with admitted traffic and a service curve for each service class, and testing an admission control condition for each of a plurality of service classes while assuming new flows have highest priority guarantees that QoS requirements of one service class using an ingress-to-egress path will be satisfied if a new set of flows of another service class using that path are admitted into the domain.

Accordingly, Applicants respectfully request the Examiner withdraw the rejection of claims 9-10 under 35 U.S.C. 103(a) based on their dependence form an allowable base claim.

Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Park et al (U.S. Pat. No. 5,872,771) in view of Mo et al. (U.S. Pat. No. 6,693,909). This rejection are respectfully traversed.

For discussion of Park et al., Applicant respectfully refers the Examiner to remarks detailed above with respect to rejection of claims 1, 11, and 12.

Mo et al. is generally directed toward transporting traffic in a packet-switched network. In particular, the Examiner relies on Mo et al. to teach an autonomous network. However, Mo et al. does not teach, suggest, or motivate assuming new flows have highest priority and testing an admission control condition for each of a plurality of service classes, wherein an arriving aggregate traffic envelope associated with admitted traffic and a service curve are obtained for each service class. These differences are significant because obtaining an arriving aggregate traffic envelope associated with admitted traffic and a service curve for each service class, and testing an admission control condition for each of a plurality of service classes while assuming new flows have highest priority guarantees that QoS requirements of one service class using an ingress-to-egress path will be satisfied if a new set of flows of another service class using that path are admitted into the domain.

Accordingly, Applicants respectfully request the Examiner withdraw the rejection of claim 13 under 35 U.S.C. 103(a) based on its dependence form an allowable base claim.

Claim 14 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Taylor (U.S. Pat. No. 5,664,170) in view of Park et al (U.S. Pat. No. 5,872,771). This rejection are respectfully traversed.

For discussion of Park et al., Applicant respectfully refers the Examiner to remarks detailed above with respect to rejection of claims 1, 11, and 12.

Taylor is generally directed toward a flexible distributed network database containing configuration information for a network divided into domains. In particular, the Examiner relies on Taylor to teach an information system that is a computer network domain. However, Taylor does not teach, suggest, or motivate assuming new flows have highest priority and testing an admission control condition for each of a plurality of service classes, wherein an arriving aggregate traffic envelope associated with admitted traffic and a service curve are obtained for each service class. These differences are significant because obtaining an arriving aggregate traffic envelope associated with admitted traffic and a service curve for each service class, and testing an admission control condition for each of a plurality of service classes while assuming new flows have highest priority guarantees that QoS requirements of one service class using an ingress-to-egress path will be satisfied if a new set of flows of another service class using that path are admitted into the domain.

Accordingly, Applicants respectfully request the Examiner withdraw the rejection of claim 14 under 35 U.S.C. 103(a) based on its dependence form an allowable base claim.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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